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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/447,974 05/23/95 HARVEY

EXAMINER
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26M1 1523

ART UNIT	PAPER NUMBER
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HOWREY & SIMON  
1299 PENNSYLVANIA AVENUE NW  
WASHINGTON DC 20004

2619  
DATE MAILED:

05/23/96

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 12-29-95 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input checked="" type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.                  |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/>  |

Part II SUMMARY OF ACTION

1. ☒ Claims 2-7 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2. ☐ Claims \_\_\_\_\_ have been cancelled.

3. ☐ Claims \_\_\_\_\_ are allowed.

4. ☒ Claims 2-7 are rejected.

5. ☐ Claims \_\_\_\_\_ are objected to.

6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

1. This action is in response to the amendments filed May 23, 1995 and December 29, 1995.
2. A series of interviews were held before prosecution began on this application. Unless identified specifically below in this part of the action, these interviews did not address the merits of any single application, but rather issues that are appropriate to all of the related "Harvey" applications.

The first interview was held on August 13, 1995. It was a personal interview. Attending were one of the applicants, Mr. Harvey, and his attorneys, Messrs. Scott and Woolston. Representing the PTO were Messrs. Godici, Yusko, Orsino, and Groody. Mr. Harvey and his attorneys were informed that because of the large number of related applications, the examination would be performed by a team of examiners. As of the August 1995 interview there existed a problem with some of the applications being charged large entity fees when applicants believed that small entity status was deserved. The PTO has referred this matter to the Office of Assistant Commissioner of Patents, specifically Hiram Bernstein, a petitions attorney. Mr. Harvey's representatives will attempt to resolve this issue through Mr. Bernstein. At this time all of the related cases had not been received in the Group. No examination was planned until at least late October because the team members were managers, and needed to complete other end of fiscal year assignments and all employee performance ratings. The PTO requested that any amendments to

the specification, other than to correct continuing status, be delayed. Mr. Harvey's representatives stated that no other amendments to the specification were actually planned. The PTO's goal will be to attempt to reduce the amount of paper passed between applicant and PTO since the cases are related and very difficult to move from cite to cite because of their size. Copies of the prior art only need to be filed once. The PTO will only send newly cited art once. Preliminary amendments are being prepared. The PTO however cautioned that the prosecution of the applications will not be delayed until applicants have filed these amendments. The PTO requested a chart establishing any relationships between cases and what parts of applicants' disclosure related blocks of cases were directed to. It was not, at this time, determined whether this chart would become part of the official file. The PTO planned to research this. It was the PTO's intent to examine related cases simultaneously. The PTO welcomed any claim amendments to include resubmissions of all claims, whether amended or not. Mr. Harvey's representatives were informed that the issue of double patenting was expected to be a major issue.

On November 2, 1995, a telephonic interview was held between Mr. Woolston and Mr. Groody. Mr. Woolston indicated that two prior art statements were being completed, one for cases with a 1987 effective date, the other for cases with a 1981 effective date.

On November 30, 1995, a personal interview was held. Representing applicants were Messrs. Scott, Woolston, and Grabarek. Representing the PTO were Messrs. Yusko, Orsino, and Groody. The content of a simultaneously filed prior art statement was discussed. The PTO's copies of the parent files are missing the non-U.S. patents cited therein. The PTO requested copies of those prior art documents. Applicants gave the PTO a document showing which cases have already been amended. Since this document merely shows the status of any amended application, it has not been made part of the file record since that paper has no bearing on the merits of any issue before the PTO.

A second interview was held on later on November 30, 1995 between Mr. Scott and Mr. Groody. The sole topic discussed was double patenting. The discussion led to no conclusions on whether a double patenting rejections would be made in these applications.

An interview was held on December 6, 1995 between Mr. Scott and Mr. Groody. The discussion was directed to In re Schneller, 158 USPQ 210 (CCPA) and whether that decision will necessitate a double patenting rejection in any of these cases. Mr Scott was asked whether a terminal disclaimer could be filed in all of the 327 related cases to obviate a possible double patenting rejection in each of these cases over each other. Mr. Scott agreed to consider this.

An interview was held on December 13, 1995 between Mr. Scott and Mr. Groody regarding the terminal disclaimer question above. Mr. Scott proposed filing a terminal disclaimer in about 250 of the 327 cases over each other if the PTO would have each of the about 250 issue within 4 or 6 months of each other. Mr. Groody felt that the PTO would be unwilling to suspend prosecution in some cases just to have other related cases issue close to each other. No agreement was reached.

Two interviews were held between Mr. Scott and Mr. Groody on April 2, 1996. Mr. Scott pointed out that, in parent file 5,233,654, there had been a restriction requirement. After reviewing the file, Mr Groody indicated that there would not be a Schneller double patenting rejection made in any case based on parent patent 5,233,654 and 5,335,277. The action recently sent out in 08/113,329 would be changed to reflect this point. Mr. Scott inquired whether a terminal disclaimer, in these applications, would have to be filed for all of the four Harvey patents (4,694,490; 4,704,725; 4,965,825; 5,109,414). Mr. Groody felt that all four should be disclaimed, if applicants elect to take that approach toward overcoming the double patenting rejections, because of the requirement in terminal disclaimers concerning common ownership. Mr. Scott indicated that in parent patent 4,965,825, there had been a multiplicity rejection. Mr. Groody will order the file, but felt that rejection would not overcome the Schneller double patenting rejections since the CCPA

did not list this situation as an acceptable reason to file continuing cases. The Court limited it exception to "independent and distinct" claims. Mr. Groody acknowledged that the Board of Appeals may accept the multiplicity argument, but, in the absence of case law on this issue, he would still apply the Schneller rejections. Future actions will elaborate on the PTO's reasoning for this conclusion.

3. The art cited in the information disclosure statements submitted by applicants has been considered. The examiner initialed 1449 forms will be sent in a later action.

4. This action will not attempt to determine the effective filing date of this application. The action will apply art against the claims using two possible effective filing dates, i.e. serial number 06/317,510, filed November 3, 1981, and serial number 07/096,096, filed September 11, 1987. Applicants can overcome the art rejections by establishing that the art applied does not meet the claimed limitations or that the art does not have an early enough filing date.

The action will make initial double patenting rejections presuming that all of the present claims were fully disclosed in both the '81 and '87 cases.

In any rejections made under 35 USC 112, first paragraph, applicants will be asked to clarify, where required by the examiner, how the present claims are fully disclosed in both the '81 and '87 cases.

5. Applicants are reminded of their duty to maintain a line of patentable demarcation between related applications. It has been noted by the PTO that many of the pending applications have similar claimed subject matter. In the related 327 applications (the serial numbers are included in a list below), it is estimated that there may be between 10,000 and 20,000 claims. Applicants should insure that substantially duplicate claims do not appear in different cases, and should bring to the PTO's attention instances where similar claims have been treated inconsistently, i.e. rejected in one case but not in another.

6. Applicants are cautioned that their continual use of alternatives in the claims raises questions concerning the exact claim meaning. More importantly, it raises questions whether the disclosure supports every possible embodiment or permutation that can be created by the alternative language.

7. Claims 3-7 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There are instances when a limitation is claimed either in the preamble or the body of the claim, and then, again later in the claims, without being prefaced by "the" or said". Applicants should confirm whether the same limitation is being claimed the second time:

claim 4, lines 13,15, and 18, "instruct signals",  
"transmitter", and "control signals",  
respectively.

At step (2) of claim 3, lines 6 and 7 do not correlate with the receiving step. The grammatical phrasing lacks clear subject, verb, object structure and clear reference to the verb "receiving". At step (3) "said processing" lacks antecedent basis.

At step (1) of claim 4, the matter "and a output---signal" at the last two lines does not correlate with the step of receiving and lacks clear grammatical structure and phrasing. Also at step (1) the recited function of the received instruct signals at a receiver station does not clearly limit the receiving step performed at the one by the intermediate data transmitter station (note 35 USC 112, para. 6 which requires the function to relate directly to, immediate to, the receiving function of the step and the transmitter station).

At lines 3 and 4 of claim 7, it is not evident how a program outputs an explanation of or explains specific datum. Specific datum would not require explanation apparently if the program contains the specific datum. Alternatively, if the program explains datum, does this explanation not include the datum? The scope of the claim thus is not clear. Further the terms "receiver specific datum" and "subscriber datum" do not occur in the specification or patent and original claims. The step of



generating or assembling messages at lines 15-20 is not clear due to the grammatical structure thereof and in particular the phrasing at lines 18, 19 of "and a output---signal", which is not clear. The reference to the storage device lacks basis in the method step or steps.

8. Claim 7 is rejected under 35 U.S.C. § 112, first and second paragraphs, as the claimed invention is not described in such full, clear, concise and exact terms as to enable any person skilled in the art to make and use the same, and/or for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The '87 case did not disclose the term "prompting". What does it mean as used in the claims? And why would this usage not be new matter?

9. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to provide an adequate written description of the invention and failing to provide an enabling disclosure for the scope of the invention claimed by claim 2.

The claim 2 method of outputting mass medium program materials at a subscriber station (end user or TV studio for

example) based on a value, a present or a projected property interest of a subscriber, lacks clear and complete basis in the written disclosure and figures. The disclosure lacks material which correlates to these terms verbatim or in a clear, complete alternative specific example (alternative terminology) and in the context of the claimed operations, including generating a schedule and processing the value (how?) in response to a command signal (the instruct-to-generate signal). Absent a clear correlation to means and modes for carrying out the claimed functions the disclosure does not enable the claim. The claim therefore is drawn to new matter which also lacks an adequate written description of the invention. Given the disclosure, it is not evident how a schedule (for example, a time based schedule or an event based schedule) is generated by a present or projected property interest in response to an instruct-to-generate signal (a command).

11. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention

were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

12. Claim 2 is rejected under 35 U.S.C. § 103 as being unpatentable over Schoeneberger et al or Campbell et al.

Both references disclose subscriber TV systems including computer or data processing means at the subscriber stations to control subscriber apparatus including the scheduling and outputting of at least one program at a given time or based on an event (abstract of Campbell et al; col. 1, lines 40-48; col. 3, lines 34-41). The scheduling and outputting of programming of any class (single or multi media, TV and/or data as suggested by the patentees) is based on a subscriber data and control value, the subscriber payment (present value) or projected value interest, property interest, represented in form of a credit level for pay-TV for example, an established credit or an advance of credit for a limited time (a billing period), and thus a projected property interest in a tier of service programs that requires premiums or in a pay-per-view service in which the value of the service, a signal relating thereto is processed with other signal(s), control signals, to produce, generate, output the schedule of one or more stored or direct real time broadcast/cable costs of one or more programs. Since the references suggest various media and material for access by subscriber, the references clearly suggest communicating mass medium program materials as claimed by applicant.

13. Claim 3 is rejected under 35 U.S.C. § 103 as being unpatentable over Lambert alone or further in view of Yarbrough et al, Schoeneberger et al and Campbell et al considered collectively.

The references evidence mass medium program systems that store program material (TV programs, audio, teletext, graphics, data) and program identification codes (subscriber datum). The program material is typically selected in response to subscriber request and prepared under computer control to be communicated to the subscriber over a given channel at a given time according to a schedule (a daily program schedule). The communicated program material is typically outputted to the subscriber via a TV display or recorded for later display.

Lambert evidences the claimed method of outputting mass medium program materials in the disclosed operation of the Figure 1 system wherein a subscriber (18) communicates desired programs to a transmitter station (11 etc) by means (22, 12). Computer (11) accesses, selects and controls program sources (25, 26), switch 24 and television transmitters according to schedule and channel. The program selection operation is based on subscriber generated datum which is associated with the program of interest and which is stored in the system along with the program and schedule. (See for example, col. 1, lines 40-67; col. 2 lines 1-48 and lines 57-65). The mass medium program system may utilize

two way coaxial cable or cable and telephone system to implement the subscriber system (col 1, lines 52-64).

Yarbrough et al further evidences a subscriber system operating to select program material for schedule transmission and reception according to subscriber selection signals (datum/control signals) and program code signals (datum/control signals) which designate given programs.

Schoeneberger et al in addition to the disclosed systems of Lambert and Yarbrough et al discloses a mass medium system function to provide pay-TV, user access to data bases, games for home entertainment, meter reading and load (appliance) control, polling advertising feed back, home shopping and business applications. A two-way cable system is exemplified.

Campbell et al further exemplifies a mass medium program system (data, text, TV) that embodies the claimed system. The difference between the claimed system and Campbell et al as well as the above referenced systems is one of terminology usage (subscriber datum vs data, control and text signals, code signals) used for purposes of identifying, selecting and outputting programs according to schedule.

The claimed subscriber to remote station communication of information regarding selected programs of interest differs over the reference systems in use of terminology of the operations involved in selecting, communicating, designating, controlling the mass medium system. Thus the claim 3 step of receiving

"instruct signals" to select a "subscriber datum" of interest does not distinguish in substance over the Lambert system, for example, which uses terminology such as menu program numbers for selecting programs from storage, subscriber identification numbers (for pay TV purposes addressing control or the like), selecting control signals which are exemplified throughout Lambert and at col. 3, lines 46-52.

14. Claims 4-6 are rejected under 35 U.S.C. § 103 as being unpatentable over Lambert alone or in view of Campbell et al or Schoeneberger et al.

At step (1) of claim 4, the intent of the last lines thereof is assumed to output mass medium programming from a storage device based on the generated control signal (see 35 USC 112 2nd para rejection above of claims 4-6).

The scope of the claim is viewed as encompassing the receiving and transmitting of "instruct signals" by a data transmitter station, receiving control signal(s) which control transmission of the instruct signals and transmitting the control signal(s) to the transmitter before a specific time. At step (1), the further recitation of the intended use or purpose of the "instruct signal" elsewhere but at the transmitter station clearly is not an embodiment of the receiver station (there is no step of communicating the "instruct signal" to a receiver station) in the method of controlling a remote intermediate data transmitter station.

As such, the claimed method follows the broad teachings of the prior art as evidenced by Lambert's operation described at col 2, lines 57-62 regarding a program menu number (instruct signal) which is transmitted by the transmitting means (14) after receiving the same from computer (11) or means (25, 26) under computer control (the claim step (2) operation) and obviously the transmitting of the computer control before a specific time (the time necessary for means (25, 26, 24, 14, 16) to deliver an output signal on cable (17) at a scheduled time) the specific time due to art recognized standards for TV studio/network, communications and equipment start-up delays associated with units (25, 26).

Regarding claim 5, the embedding of control signals in an instruct signal(s) or in an information transmission as claimed is typical of the prior art systems as further evidenced by Campbell et al wherein such control and/or instruct signals are selectively embedded in a TV or cable system transmission during the versicle blanking period of the TV picture signal. This operation is an art recognized alternative to the exemplified use of a separate channel by Lambert for conveying program menus and associated (embedded) control or selection signals. Also, at col. 3 lines 33-36 of Lambert, is the suggestion that any form of TV transmission, text information, included, would be usable to convey programs, menus, control signals, etc. Given the Lambert and Campbell et al modes and means for conveying control, data,

text signals, including embedding such signals in the versicle blanking interval of TV signals (see abstract of Campbell et al) it would have been obvious to the artisan to embed control signals with instruct signals or in an information transmission as claimed. Embedding would occur using time or frequency multiplexing techniques known in the art (see Schoeneberger et al at col. 4, lines 54-56 and col 8, lines 19-27).

Regarding claim 6, the selection transmission devices (14) are controlled or controllable to selectively transmit programs or menus at different times (schedules) as claimed, over cable 17.

15. Claim 7 is rejected under 35 U.S.C. § 103 as being unpatentable over Lambert, Yarbrough, Schoeneberger et al, Campbell et al as applied to claim 3 above, and further in view of Brown.

The prior art of mass medium programming typically exemplifies programs that contain or explain receiver specific datum, datum relating to a menu of programs, products, or services the receiver is capable of acquiring and outputting as evidenced by Lambert at col 2, lines 51-68 to col 3, line 36, by Campbell et al at col 1, lines 15-55; col 2, lines 54-64; col 3 lines 20-27; and Brown's addressable control of a subscriber's channel reception providing subscriber and receiver datum relating to decrypting keys, cable TV services, subscriber



interaction, prompting, and selection of control of services outputted at the subscriber output station for example.

Schoeneberger et al further evidenced subscriber networks and operations of mass medium programs that contain or explain (inherent of menus of programs selected via coded designations) receiver specific datum (one of a service authorized the subscriber, one of which services require fees, credits, one of which datum controls outputting a selected datum, program service, etc). (See col 2, lines 33-63; col 3, lines 25-41; col 4, lines 54-64 for system capabilities which embody the claimed method of subscriber network control and outputting of mass medium programming (combined TV and teletext or graphics).

Given the collective teachings of the references it would have been obvious to the artisan to output a mass medium program (TV and teletext, graphics, subtitles, captions) to a subscriber output apparatus (display or displays, printer, audio, video mens computer), to prompt the subscriber by means of a menu of programs, products, services (datum) specific to a given subscriber (receiver) to have the subscriber select by code (datum) one or more programs of interest, to communicate the same to a remote site (station) in the network and generate (assemble) at the remote site (station) a schedule of programs and based on control signal(s) such as time and channel select control signals communicate (transmit) the program(s) to a subscriber and receiving the receiver specific datum (the desired service, the

authorized tier of service etc) since the references evidence such subscriber network of interactive programming to be typical in the prior art.

16. The double patenting rejections in this action are based on the premise that all of the present claims were fully disclosed in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414. Since there was a restriction made in 5,233,654, there will be no double patenting made on that patent or 5,335,277.

17. The PTO's copies of the parent files are in poor form since they have been copied many time by members of the public. The files also are missing some of the papers. The double patenting rejections below presumes that there were no requirements for restriction made in any of the parent files.

18. There are three types of double patenting rejections:

- a) Statutory double patenting rejection under 35 USC 101,
- b) Nonstatutory obvious type double patenting,
- c) Nonstatutory non-obviousness type double patenting.

In this action, the rejections of the third type that are directed to the claims of the parent patented files will have two different versions. The first rejects the claims because they have not been established to be independent and distinct from the patented claims. The second version includes that premise, and further supports the rejection by establishing that representative claims from this application have common subject matter with representative ones of the patented claims.

19. Claims 2-7 (all of the claims in this application) are rejected under the judicially created doctrine of non-obviousness non-statutory double patenting over the patented claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414 since the claims, if allowed, would improperly extend the "right to exclude" already granted in those patents.

The subject matter claimed in the instant application is fully disclosed in the patents and is covered by the patents since the patents and the application are claiming common subject matter, as follows: a signal processing apparatus and method including an interactive communications system apparatus and method. Furthermore, there is no apparent reason why applicants were prevented from presenting claims corresponding to those of the instant application during prosecution of the parent applications which matured into patents. *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

A review of the claims in each of the four parent patents (5,109,414; 4,964,825; 4,704,725; 4,694,490) was made. These patented claims do not appear "independent and distinct" from the claims in this application. The present claims are directed to a method and apparatus for controlling communications including television communications or programming. The claims in patent 5,109,414 were directed to a processing system and method for signal distribution including television. The claims in patent 4,965,825 were directed to a system and process for signal

processing including carrier communications. The claims in patent 4,704,725 were directed to a method of communicating data to receiver stations. The claims in patent 4,694,490 were directed to a method for communicating and processing television programs.

Applicants' invention can be envisioned at in three parts. As with most cable TV systems, there is a head end station which generates the video programming. Applicants have included an intermediate station which receives transmissions, from the head end or subscriber stations, and distributes the programming to each subscriber. The subscriber station receives the programming, and can communicate to the intermediate station with requests or instructions. Even if the claims directed to each station were "independent and distinct" from the claims directed to the other stations, there would be no reason to "restrict" between the three stations since their overall function is so interrelated that the stations have the same search area, i.e the PTO could not establish a burden if required to search for all three stations.

It is believed that CCPA in *Schneller* used the "independent and distinct" standard as the main factor in its determination that the double patenting rejection should be affirmed. The CCPA stated that the fundamental reason supporting the principle of non-statutory double patenting rejections is to prevent unjustified timewise extension of the right to exclude granted by

a patent no matter how the extension is brought about. Further the CCPA stated at 158 USPQ 210 (214):

"... To conform to this reason and to prevail here, appellant has the burden of establishing that the invention in his patent is "independent and distinct" from the invention of the appealed claims. The public policy considerations underlying 35 U.S.C. 121 permit separate patents on "independent and distinct" inventions which are initially "claimed in one application." The statute places initial responsibility for this determination on the Commissioner of Patents. Where, as here, no such determination has been made, it is necessary to scrutinize carefully an applicant's voluntary alleged determination of this issue for it can lead to the improper proliferation of patents on the same invention with the inherent result of extending timewise a patentee's right to exclude others from the invention disclosed in the original application and on which his patent has issued."

The CCPA further stated at page 215 the length of time between an earlier patent and a later filed application should be considered. The filing date of this application was over seven years after the first patent issued (serial number 06/317,510, filed November 3, 1981, patented as 4,694,490 on September 15, 1987) and over four years after the first CIP issued as a patent (serial number 07/096,096, filed September 11, 1987, patented as 4,965,825 on October 23, 1990).

To the extent that one would view *Schneller* and *In re Kaplan*, 789 F.2d 1574, 229 USPQ 678 (Fed. Cir. 1986) to be in conflict, it is clear that *Schneller* is the controlling precedent to the factual situation here. In *Schneller*, the Court specifically distinguished a situation of the same applicant from one where the application and patent had different inventive entities. In *Kaplan*, the inventive entities between the patent

and application were different, as was required at the time of the Kaplan invention, since Kaplan's filing date was before the Patent Law Amendments Act of 1984. In this present case, as with *Schneller*, the inventive entities of the application and patent are the same. Clearly, Kaplan was required, or entitled, to file separate applications, whereas applicants and Schneller did not have reason to do so. Finally, decisions of a three-judge panel of the Federal Circuit cannot overturn prior precedential decisions of the CCPA. See *UMC Elec. Co. v. United States* 2 USPQ2d 1465.

It is acknowledged that a multiplicity rejection was mailed on July 27, 1989 in parent file 07/096,096. In this rejection, the examiner had limited the applicants to 25 claims.

*Schneller* did not equate a multiplicity rejection with a restriction requirement as a permissible exception to being subject to the non-obvious non--statutory double patenting rejection. For that reason, this action will not overturn the legal reasoning in *Schneller* which supports the non-statutory non-obviousness double patenting rejection above.

It is believed, however, that applicants arguments on this multiplicity issue can be better supported if a nexus is established between the claims of this application and those that were cancelled in 07/096,096 in response to the multiplicity requirement.

Notwithstanding the comment above, at the time the examiner made the multiplicity rejection, there was a body of case law that had overturned similar rejections. Note *In re Flint* 162 USPQ 228 (CCPA 1969) and *In re Wakefield*, 164 USPQ 636 (CCPA 1970).

20. Claims 2-7 (all of the claims in this application) are rejected under the judicially created doctrine of non-obviousness non-statutory double patenting over the patented claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414 since the claims, if allowed, would improperly extend the "right to exclude" already granted in those patents.

This rejection incorporates the rejection above. That double patenting rejection is further supported by *Schneller* because the great majority of the patented claims are "comprising" type claims.<sup>1</sup> While it is recognized that the specific claim limitations in the application may not have been claimed in the patents, that alone does not establish grounds for overcoming this rejection. The patent claims were directed to parts of applicants' total disclosed system or process. Therefore the recitation of "comprising" enables those patented claims to "cover" claim features now recited by applicants' present application claims.

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<sup>1</sup>The claims that recite neither "comprising" nor "consisting" are considered to recite open claim language, i.e. equivalent to "comprising". See, for example, claim 1 of Patent 5,109,414.

Since the head end, intermediate, and subscriber stations are part of the overall system, claims to one part "cover" the other part(s) under the *Schneller* decision (page 215), since the preferred embodiment would include all three parts of the main system, i.e. head, intermediate, and subscriber stations. For example, claims to the subscriber station still cover the intermediate station because the subscriber station would be processing information that had to come from the intermediate station. A second example would be that claims to one aspect or function of the intermediate station would cover the invention of another aspect or function of the intermediate station since both functions could be performed with the other. Applicants' disclosed system includes similar features in the head, intermediate, and subscriber stations. For example, the stations can transmit and receive, and have computer, processor and controller capabilities. For that reason, the disclosure will permit broadly drafted claims to read on either the head, intermediate, or subscriber station. Patent claims that recite receiving and transmitting can cover both intermediate and subscriber stations. The fact that patent claims and application claims are directed to different elements does not prohibit this rejection if there is common or interrelated subject matter recited. The Court in *Schneller* stated at page 215:

"... They "cover" the preferred form ABCXY, common to the patent and this application, in the same sense. The fact that X and Y are distinct elements, performing, independent functions, so that either can be employed without the other,



does not change this fact. Neither does appellant's omission of reference to the lip Y from his patent claims."

Application claim 4 is a representative claim. It is directed to a method of controlling a transmitter station to communicate data to receiver stations by receiving instruct signals to be transmitted by the transmitter station, delivering them to a transmitter, the instruct signals effective to generate a schedule and output program materials in accordance with the schedule, receiving control signals, and transmitting the control signals.

Further, it is evident from the subscriber station disclosed that storing of and processing of a "value" signal to generate a schedule of outputting mass medium materials is not materially different from storing other program identifying data or supplemental data identification inputted by the subscriber or received and stored for the purpose of later coordinating the outputting of the data with a schedule of one or more programs later broadcast or received.

A review of representative ones of the patented claims will demonstrate that the patented claims cover the invention claimed in this application:

a) In patent 4,694,490, claim 7 is representative of the claimed method for communicating TV program information to a receiver station. The receiver station receives the video data, displays it, detects the presence of overlay

information using an instruct signal, and has computers generate and transmit this overlay info to the display.

b) In patent 4,704,725, claim 3 is representative, and, as summarized below, recites a method of communicating data comprising:

- a) multiple receivers, each with a computer,
- b) transmitting instruct to transmit signals to the computers,
- c) detecting the signals and coupling them to the selected computers,
- d) having the computers control their own selected output device.

c) In patent 4,965,825, claim 24 is representative, and, as summarized below, recites generating a computer output having the steps of:

- a) having multiple receivers, each with a computer,
- b) transmitting an instruct to generate signal to the computers,
- c) causing the computers to generate individual user output information.

d) In patent 5,109,414, claim 15 is representative, and, as summarized below, recites a signal processing system (including):

- a) receiver/distribution means,
- b) switch means,
- c) control signal detector means for transferring data to storage means,
- d) storage means for storing and transferring data to processor means,
- e) processor means for controlling.

While claim 15 is an apparatus claim, a method claim and apparatus claim do not in themselves establish groups that are "independent and distinct".

The patented claims are also primarily directed to methods or structure to control element(s) either directly at that station or at another remote station. This control is generally completed with the reception or recognition of an instruct signal. The same common concept exists in application claim 4. All of the claims, both patented and pending in this application, when considered together, effectively recite parts of the preferred embodiment, i.e. a head, intermediate, and subscriber station. The patented claims "cover" the claims of the application because the patented limitations do not exclude the limitations of this application.

In the arguments above, the examiner, when discussing several of the patents, stated that the patented claims were broad enough to read on multiple stations. While it is believed this analysis is correct, it is not critical to this rejection. Since the patented claims recite limitations that are interrelated with other similar features claimed in this application, it is the examiner's position that those patented claims "cover" the application claims because all of these claimed features (both in the patent and application) describe what is effectively the preferred embodiment.

The claims in this application, if allowed without a terminal disclaimer, would continue patent protection of the preferred embodiment, i.e. the complete system of the head,

intermediate, and subscriber stations, beyond the expiration of applicants' parent patents.

21. A determination of a possible non-statutory double patenting rejection obvious-type in each of the related 327 applications over each other will be deferred until a later time. This action is taken in view of the possibility that many of these applications may be abandoned or merged.

22. Claims 2-7 are rejected under the judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and the following related U.S. applications (all of the application are series 08):

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#	Ser. No.	#	Ser. No.	#	Ser. No.
1	397371	2	397582	3	397636
4	435757	5	435758	6	437044
7	437045	8	437629	9	437635
10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659
19	439668	20	439670	21	440657
22	440837	23	441027	24	441033
25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887
49	445045	50	445054	51	445290
52	445294	53	445296	54	445328
55	446123	56	446124	57	446429
58	446430	59	446431	60	446432
61	446494	62	446553	63	446579
64	447380	65	447414	66	447415
67	447416	68	447446	69	447447
70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711
79	447712	80	447724	81	447726
82	447826	83	447908	84	447938
85	*****	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979
109	449097	110	449110	111	449248
112	449263	113	449281	114	449291

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#	Ser. No.	#	Ser. No.	#	Ser. No.
115	449302	116	449351	117	449369
118	449411	119	449413	120	449523
121	449530	122	449531	123	449532
124	449652	125	449697	126	449702
127	449717	128	449718	129	449798
130	449800	131	449829	132	449867
133	449901	134	450608	135	451203
136	451377	137	451496	138	451746
139	452395	140	458566	141	458699
142	458760	143	459216	144	459217
145	458218	146	459506	147	459507
148	459521	149	459522	150	459788
151	460043	152	460081	153	460085
154	460120	155	460187	156	460240
157	460256	158	460274	159	460387
160	460394	161	460401	162	460556
163	460557	164	460591	165	460592
166	460634	167	460642	168	460668
169	460677	170	460711	171	460713
172	460743	173	460765	174	460766
175	460770	176	460793	177	460817
178	466887	179	466888	180	466890
181	466894	182	467045	183	467904
184	468044	185	468323	186	468324
187	468641	188	468736	189	468994
190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355
199	469496	200	469517	201	469612
202	469623	203	469624	204	469626
205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996

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#	Ser. No.	#	Ser. No.	#	Ser. No.
229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496
238	474674	239	474963	240	474964
241	475341	242	475342	243	477547
244	477564	245	477570	246	477660
247	477711	248	477712	249	477805
250	477955	251	478044	252	478107
253	478544	254	478633	255	478767
256	478794	257	478858	258	478864
259	478908	260	479042	261	479215
262	479216	263	479217	264	479374
265	479375	266	479414	267	479523
268	479524	269	479667	270	480059
271	480060	272	480383	273	480392
274	480740	275	481074	276	482573
277	482574	278	482857	279	483054
280	483169	281	483174	282	483269
283	483980	284	484275	285	484276
286	484858	287	484865	288	485282
289	485283	290	485507	291	485775
292	486258	293	486259	294	486265
295	486266	296	486297	297	487155
298	487397	299	487408	300	487410
301	487411	302	487428	303	487506
304	487516	305	487526	306	487536
307	487546	308	487556	309	487565
310	487649	311	487851	312	487895
313	487980	314	487981	315	487982
316	487984	317	488032	318	488058
319	488378	320	488383	321	488436
322	488438	323	488439	324	488619
325	488620	326	498002	327	511491

The subject matter claimed in the instant application is fully disclosed in the referenced copending applications and would be covered by any patent granted on that copending applications since the referenced copending applications and the instant application are claiming common subject matter, as follows: a signal processing apparatus and method including an interactive communications system apparatus and method.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending applications. *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

A review of the claims in the related copending applications was made. These claims do not appear independent and distinct from the claims in this application. It is believed that CCPA in *Schneller* used the "independent and distinct" standard as the main factor in its determination that the double patenting rejection should be affirmed. The relevant arguments in the preceding paragraphs in support of this position are incorporated herein.

23. The non-statutory double patenting rejection, whether of the obvious-type or non-obvious-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornam*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).



A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78 (d).

Effective January 1, 1994, a registered attorney or agent of record may sign a Terminal Disclaimer. A Terminal Disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

24. 35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

25. Claims 3-7 are rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 3-7 of prior U.S. Patent No. application no. 08/449,652. This is a double patenting rejection.

The claims are correspondingly duplicate claims.

26. A request to correct filing receipt filed December 7, 1995 is acknowledged, and will be processed in due course.

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The references listed are pertinent regarding subscriber station operations of mass medium communications, processing, control etc.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Groody whose telephone number is (703) 308-5461.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.



James J. Groody  
Supervisory Patent Examiner  
Art Unit 262

*Group 2600*